



Metrics Planning and Reporting Study Status Overview

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“Community”

Participants: Don Collins, JPL;
Frank Lindsay, U of MD;
Hank Wolf, GMU

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Purpose of Study

- Identify various types of institutions to be funded and appropriate funding mechanisms for participants
- Define appropriate metrics collection and monitoring mechanisms for reporting (publicizing) performance (accomplishments)
- Recommend, to Earth Science Enterprise, appropriate language for inclusion in various types of solicitations

Approach

- Engage community through workshops and survey interviews
- Survey sponsoring and implementing organizations
 - Identify/Define “classes” of participants (data service provider classes similar to types of ESIPs; Program and Project offices) and define reporting requirements
 - Survey existing mechanisms for metrics planning and reporting, and their pros and cons
 - Contact projects (e.g., HST, ESSP), ESIP federation members and other entities to learn about mechanisms being used
 - Obtain opinions of sponsoring organizations about metrics information they are getting (and missing)
- Identify metrics planning and reporting requirements for announcement opportunities and funding instruments
 - Identify requirements mandated by the government (NPGs etc.) as appropriate to different classes of participants and dollar levels
 - Identify documentation requirements for different classes of participants (Grants, Cooperative Agreements, Working Agreements, Contracts, IRDs, ICDs, Operations Agreements, etc.)
 - Identify requirements/funding flow options for the different classes of participants

Status

□ Community Workshop, Feb 5 - 7, 2002

- ~15 individuals attended breakout session
 - Representatives from HQ, DAACs, ESIPs and SEEDS team
- 3 new participants added to team, all 3 participate in weekly telecon with Ramapriyan, Greg Hunolt and Bud Booth:
 - Don Collins, Manager, JPL PODAAC
 - Hank Wolf, Assistant Director of CEOSR, George Mason University; Member, Seasonal to Inter-annual ESIP-2 Project
 - Frank Lindsay, Manager, Global Land Cover Facility ESIP-2, University of Maryland
- Reinforced multiple viewpoints for metrics planning and reporting. This will provide a basic framework for the study since it defines the relationships among the various “classes” of participants.
 - Currently looking at 5 classes for SEEDS:
 - NASA HQ, End Users, NASA (and Non-NASA) project sponsors, Data Providers, and Provider internal organizations.
 - Accountability and metrics management, including specification of “value” and “success” measures all depend on what class you are considering.
- General consensus was that current metrics only partially reflect a provider’s performance, e.g., measures of utilization of data and products by the science community are currently not reflected in metrics collection. The solution to this is not easy.

Status, Cont'd

□ Survey sponsoring and implementing organizations

- Draft question list sent to Don Collins, Hank Wolf and Frank Lindsay (Focus Review Team) for review and comment, resulting in excellent feedback:
 - Current draft largely ignored direct questions on accountability.
 - Need to differentiate between a project's organization and its institutional organization - two very different views (e.g., task-reporting and administrative-reporting).
 - To improve clarity and simplicity, like questions were grouped under their own headings, several questions were merged and simplified, and several new questions were suggested.
 - Based on this feedback, a revised question list was sent to the Focus Review Team for further review and comment prior to delivery to participants.
- Additional participants were suggested: NSF, ASF DAAC, SEDAC, DOE and NOAA facilities, financial community, commercial applications developers, geophysical community. All will be given consideration as the study progresses.
- Survey questionnaire scheduled to be distributed to participants week of March 4.
 - Each participant will be personally contacted and interviewed as part of the survey process.
 - There are 26 participants on the initial "visit list."
 - The Focus Review Team recommended that the Questionnaire be posted to the SEEDS Web Site.

Status, Cont'd

- **Identify metrics planning and reporting requirements for various announcement opportunities and funding instruments**
 - The goal is to define appropriate solicitation opportunities and funding instruments for the various “classes” of SEEDS participants and dollar levels
 - Currently reviewing funding instruments: grants, contracts, cooperative agreements, interagency agreements, NASA internal (Centers and JPL), Space Act Agreement.
 - Currently reviewing various NASA opportunities: AO, NRA, CAN, and NASA Announcements.
 - Draft report scheduled for April 1, 2002

Schedule

Task Start - December 2001

Draft questions to send to sponsors and implementing organizations - January 4, 2002 (*completed*)

Community Workshop - February 5-7, 2002 (*completed*)

Refine questions and "visit list" - February 15, 2002 (*completed*)

Distribute questionnaires to "visit list" - March 8, 2002

Draft report on metrics planning and reporting as a function of "class" - April 1, 2002

Obtain responses and conduct follow-up interviews - March - May 2002

Preliminary report - June 30, 2002

Further contacts with sponsors and implementing organizations as needed - July - October 2002

Recommendations to ESE about metrics planning and reporting mechanisms - December 2002

Backup charts

Initial Visit List

EDC	DAAC
GSFC	DAAC
JPL	DAAC
Langley ASDC	DAAC
NSIDC	DAAC
GHRC	ESIP-1
Global Land Cover Facility	ESIP-2
Ocean ESIP	ESIP-2
Passive Microwave	ESIP-2
Seasonal to Interannual	ESIP-2
Tropical Rainforest Information Center	ESIP-2
SciFish	ESIP-3
Terraindata.com	ESIP-3
TerraSIP	ESIP-3
MISR	IT
Grace	Mission
QuikScat	Mission
SeaWiFS	Mission
Nautilus	RESAC
LaTIS	SIPS
MODAPS	SIPS
TSDIS	SIPS
NSSDC	
Planetary Data System	
Space Sci Data Opns	
STScI	

Questionnaire (page 1 of 5)

NAME OF ACTIVITY:

TYPE OF ACTIVITY (FLIGHT PROJECT DATA SYSTEM, RESEARCH PROJECT DATA SYSTEM, DATA CENTER, ETC.):

POINT OF CONTACT (POC):

Name:

Phone:

FAX:

e-mail:

A. Mission (Summary Level)

The intent of these questions is to establish a context for the questions to come.

1. Please describe the mission, major goals and top priorities of your activity.
2. What is the planned life cycle for your activity, including start date, current stage, and planned end or completion date?
3. Please list any other activities that your activity directly supports (e.g. a research activity or data center to whom you regularly provide data or products).
4. Please briefly describe the community of users your activity serves.

Questionnaire (page 2 of 5)

B. Organizational Relationships

The intent of these questions is to develop an understanding of how your activity fits into a bigger picture of organizations, responsibility, and flow of resources. They also seek to obtain information about institutional infrastructure, resource sharing, and institutional commitments appropriate to the function of your activity (e.g., scientific research, mission support, long-term archiving).

1. Please provide a chart(s) showing how your activity fits into any broader structure your activity is a part of (e.g. a Branch of a Division of a Center, a group within an institute at a university). Please highlight management relationships as well as project or working relationships with other activities.
2. What organization(s) fund your activity? Please explain what parts of your overall activity are funded by each.
3. If you are funded from more than one source, what is your experience with conflicts between your sponsors' different priorities or expectations?
4. In each case, what instrument(s) (e.g. contract, grant, cooperative agreement, etc.) is/are used to administer your funding, and do you find the administrative instrument(s) suitable for your activity's mission? Please explain any case in which you do not.
5. If your activity includes distributed elements that you fund and administer, what mechanism(s) (e.g. contract, grant, cooperative agreement, etc.) do you use with your distributed elements, and do you find them suitable in each case?
6. What are the technical and financial reporting requirements you have for your distributed elements?

Questionnaire (page 3 of 5)

C. Metrics Collection and Reporting

The intent of these questions is to obtain an understanding of success metrics that are currently being used and any recommendations you have for improving them in the future.

1. What are the technical and financial reporting requirements, including metrics, that you meet? Which metrics do you feel are the key ones for reporting your activity's performance?
2. How much resource (time or FTE) does your activity spend collecting and reporting metrics?
3. What metrics do you collect that are particularly useful to support your internal management requirements (e.g., items you monitor to improve system performance or operational efficiency)?
4. Do you find that metrics collected by your activity and reported to your sponsor(s) are useful for reporting your successful accomplishments, and detecting and facilitating the mitigation of problems? If not, why not?
5. Do you feel that you have adequate input in defining the performance metrics that you collect and report to your sponsor? If not, please explain.
6. How do you believe your success is judged by your sponsor(s) and your user community? Do the metrics required by your sponsor reflect your user community's satisfaction with your performance?
7. What metrics would you like to be able to measure and report in order to improve your sponsor's understanding of your activity's performance or value?

Questionnaire (page 4 of 5)

D. Accountability

The intent of these questions is to obtain an understanding of the any mandatory requirements you have for accountability in various areas, and ideas you have on improving the processes by which such requirements are enforced, especially keeping in mind that the requirements should be commensurate with your functions.

1. What are your accountability requirements for Information Technology (IT) security? How do you assure that they are met? How do you report on them?
2. What are your accountability requirements for other mandates from your sponsor(s)? (e.g., user privacy, web-site accessibility). How do you report on them?
3. What are your accountability requirements for data stewardship (short-term or long-term)? How do you report on them?
4. Please include any recommended improvements to mechanisms for ensuring accountability as they apply to the functions of your activity.

Questionnaire (page 4 of 5)

E. General

1. Do you feel that you have the authority (the ability to directly control or manage your activity's work) that you need to do the job that you are held accountable for? If not, please explain (e.g., in what areas do you need more authority to provide services for which you are held accountable?).
2. What, if any, new or improved means (e.g., workshops, conferences, special issue journals, etc.), would you recommend for the future to better publicize your accomplishments as well as for the benefit of ESE data systems and services? What could a "SEEDS Office" of the future do to facilitate publicizing accomplishments of activities, such as yours, funded by ESE?
3. Please provide any additional comments you think would be helpful.